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RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/780,224B**

DATE: 07/19/2002
TIME: 14:49:37

Input Set : **A:\208859.ST25.txt**
Output Set: **N:\CRF3\07192002\I780224B.raw**

```
 3 <110> APPLICANT: Roelvink, Petrus W
 4        Kovesdi, Imre
 5        Wickham, Thomas J
 7 <120> TITLE OF INVENTION: ADENOVIRAL CAPSID CONTAINING CHIMERIC PROTEIN IX
 9 <130> FILE REFERENCE: 208859
11 <140> CURRENT APPLICATION NUMBER: US 09/780,224B
12 <141> CURRENT FILING DATE: 2002-07-02
14 <150> PRIOR APPLICATION NUMBER: US 60/181,163
15 <151> PRIOR FILING DATE: 2000-02-09
17 <160> NUMBER OF SEQ ID NOS: 15
19 <170> SOFTWARE: PatentIn Ver. 3.1
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 144
23 <212> TYPE: PRT
24 <213> ORGANISM: Adenovirus
26 <400> SEQUENCE: 1
27 Met Asn Gly Thr Thr Gln Asn Asn Ala Ala Leu Phe Asp Gly Gly Val
28  1               5                   10                  15
30 Phe Ser Pro Tyr Leu Thr Ser Arg Leu Pro Tyr Trp Ala Gly Val Arg
31              20                  25                  30
33 Gln Asn Val Val Gly Ser Thr Val Asp Gly Arg Pro Val Ala Pro Ala
34          35                  40                  45
36 Asn Ser Ser Thr Leu Thr Tyr Ala Thr Ile Gly Pro Ser Pro Leu Asp
37      50                  55                  60
39 Thr Ala Ala Ala Ala Ala Ala Ser Ala Ala Ala Ser Thr Ala Arg Ser
40  65                  70                  75                  80
42 Met Ala Ala Asp Phe Ser Phe Tyr Asn His Leu Ala Ser Asn Ala Val
43              85                  90                  95
45 Thr Arg Thr Ala Val Arg Glu Asp Ile Leu Thr Val Met Leu Ala Lys
46              100                 105                 110
48 Leu Glu Thr Leu Thr Ala Gln Leu Glu Glu Leu Ser Gln Lys Val Glu
49          115                 120                 125
51 Glu Leu Ala Asp Ala Thr Thr His Thr Pro Ala Gln Pro Val Thr Gln
52      130                 135                 140
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 125
56 <212> TYPE: PRT
57 <213> ORGANISM: Adenovirus
59 <400> SEQUENCE: 2
60 Met Ala Glu Glu Gly Arg Ile Tyr Val Pro Tyr Val Thr Ala Arg Leu
61  1               5                   10                  15
63 Pro Lys Trp Ser Gly Ser Val Gln Asp Lys Thr Gly Ser Asn Met Leu
64              20                  25                  30
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```
66 Gly Gly Val Val Leu Pro Pro Asn Ser Gln Ala His Arg Thr Glu Thr
67      35                  40                  45
69 Val Gly Thr Glu Ala Thr Arg Asp Asn Leu His Ala Glu Gly Ala Arg
70      50                  55                  60
72 Arg Pro Glu Asp Gln Thr Pro Tyr Met Ile Leu Val Glu Asp Ser Leu
73 65                  70                  75                  80
75 Gly Gly Leu Lys Arg Arg Met Asp Leu Leu Glu Glu Ser Asn Gln Gln
76                  85                  90                  95
78 Leu Leu Ala Thr Leu Asn Arg Leu Arg Thr Gly Leu Ala Ala Tyr Val
79              100                 105                 110
81 Gln Ala Asn Leu Val Gly Gly Gln Val Asn Pro Phe Val
82              115                 120                 125
84 <210> SEQ ID NO: 3
85 <211> LENGTH: 125
86 <212> TYPE: PRT
87 <213> ORGANISM: Adenovirus
89 <400> SEQUENCE: 3
90 Met Ala Glu Glu Gly Arg Ile Tyr Val Pro Tyr Val Thr Ala Arg Leu
91   1               5                  10                  15
93 Pro Lys Trp Ser Gly Ser Val Gln Asp Lys Thr Gly Ser Asn Met Leu
94              20                  25                  30
96 Gly Gly Val Val Leu Pro Pro Asn Ser Gln Ala His Arg Thr Glu Thr
97      35                  40                  45
99 Val Gly Thr Glu Ala Thr Arg Asp Asn Leu His Ala Glu Gly Ala Arg
100     50                  55                  60
102 Arg Pro Glu Asp Gln Thr Pro Tyr Met Ile Leu Val Glu Asp Ser Leu
103 65                  70                  75                  80
105 Gly Gly Leu Lys Arg Arg Met Asp Leu Leu Glu Glu Ser Asn Gln Gln
106                 85                  90                  95
108 Leu Leu Ala Thr Leu Asn Arg Leu Arg Thr Gly Leu Ala Ala Tyr Val
109             100                 105                 110
111 Gln Ala Asn Leu Val Gly Gly Gln Val Asn Pro Phe Val
112             115                 120                 125
114 <210> SEQ ID NO: 4
115 <211> LENGTH: 140
116 <212> TYPE: PRT
117 <213> ORGANISM: Adenovirus
119 <400> SEQUENCE: 4
120 Met Ser Ala Asn Ser Phe Asp Gly Ser Ile Val Ser Ser Tyr Leu Thr
121   1               5                  10                  15
123 Thr Arg Met Pro Pro Trp Ala Gly Val Arg Gln Asn Val Met Gly Ser
124             20                  25                  30
126 Ser Ile Asp Gly Arg Pro Val Leu Pro Ala Asn Ser Thr Thr Leu Thr
127             35                  40                  45
129 Tyr Glu Thr Val Ser Gly Thr Pro Leu Glu Thr Ala Ala Ser Ala Ala
130     50                  55                  60
132 Ala Ser Ala Ala Ala Ala Thr Ala Arg Gly Ile Val Thr Asp Phe Ala
133 65                  70                  75                  80
135 Phe Leu Ser Pro Leu Ala Ser Ser Ala Ala Ser Arg Ser Ser Ala Arg
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RAW SEQUENCE LISTING   DATE: 07/19/2002
PATENT APPLICATION: US/09/780,224B   TIME: 14:49:37

Input Set : A:\208859.ST25.txt
Output Set: N:\CRF3\07192002\I780224B.raw

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136                      85              90               95
138 Asp Asp Lys Leu Thr Ala Leu Leu Ala Gln Leu Asp Ser Leu Thr Arg
139             100             105             110
141 Glu Leu Asn Val Val Ser Gln Gln Leu Leu Asp Leu Arg Gln Gln Val
142         115             120             125
144 Ser Ala Leu Lys Ala Ser Ser Pro Pro Asn Ala Val
145     130             135             140
147 <210> SEQ ID NO: 5
148 <211> LENGTH: 140
149 <212> TYPE: PRT
150 <213> ORGANISM: Adenovirus
152 <400> SEQUENCE: 5
153 Met Ser Thr Asn Ser Phe Asp Gly Ser Ile Val Ser Ser Tyr Leu Thr
154   1               5              10              15
156 Thr Arg Met Pro Pro Trp Ala Gly Val Arg Gln Asn Val Met Gly Ser
157             20              25              30
159 Ser Ile Asp Gly Arg Pro Val Leu Pro Ala Asn Ser Thr Thr Leu Thr
160         35              40              45
162 Tyr Glu Thr Val Ser Gly Thr Pro Leu Glu Thr Ala Ala Ser Ala Ala
163     50              55              60
165 Ala Ser Ala Ala Ala Ala Thr Ala Arg Gly Ile Val Thr Asp Phe Ala
166 65              70              75              80
168 Phe Leu Ser Pro Leu Ala Ser Ser Ala Ala Ser Arg Ser Ser Ala Arg
169             85              90              95
171 Asp Asp Lys Leu Thr Ala Leu Leu Ala Gln Leu Asp Ser Leu Thr Arg
172             100             105             110
174 Glu Leu Asn Val Val Ser Gln Gln Leu Leu Asp Leu Arg Gln Gln Val
175         115             120             125
177 Ser Ala Leu Lys Ala Ser Ser Pro Pro Asn Ala Val
178     130             135             140
180 <210> SEQ ID NO: 6
181 <211> LENGTH: 132
182 <212> TYPE: PRT
183 <213> ORGANISM: Adenovirus
185 <400> SEQUENCE: 6
186 Met Ser Gly Phe Thr Glu Gly Asn Ala Val Ser Phe Glu Gly Gly Val
187   1               5              10              15
189 Phe Ser Pro Tyr Leu Thr Thr Arg Leu Pro Ser Trp Ala Gly Val Arg
190             20              25              30
192 Gln Asn Val Val Gly Ser Asn Val Asp Gly Arg Pro Val Ala Pro Ala
193         35              40              45
195 Asn Ser Thr Thr Leu Thr Tyr Ala Thr Ile Gly Ser Ser Val Asp Thr
196     50              55              60
198 Ala Ala Ala Ala Ala Ala Ser Ala Ala Ala Ser Thr Ala Arg Gly Met
199 65              70              75              80
201 Ala Ala Asp Phe Gly Leu Tyr Asn Gln Leu Ala Ala Ser Arg Leu Arg
202             85              90              95
204 Glu Glu Asp Ala Leu Ser Val Val Leu Thr Arg Leu Glu Glu Leu Ser
205             100             105             110
```

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207 Gln Gln Leu Gln Asp Met Ser Ala Lys Met Ala Leu Leu Asn Pro Pro
208         115             120             125
210 Ala Asn Thr Ser
211      130
213 <210> SEQ ID NO: 7
214 <211> LENGTH: 133
215 <212> TYPE: PRT
216 <213> ORGANISM: Adenovirus
218 <400> SEQUENCE: 7
219 Met Ser Gly Ser Met Glu Gly Asn Ala Val Ser Phe Lys Gly Gly Val
220   1           5               10                  15
222 Phe Ser Pro Tyr Leu Thr Thr Arg Leu Pro Ala Trp Ala Gly Val Arg
223             20              25              30
225 Gln Asn Val Met Gly Ser Asn Val Asp Gly Arg Pro Val Ala Pro Ala
226         35              40              45
228 Asn Ser Ala Thr Leu Thr Tyr Ala Thr Val Gly Ser Ser Val Asp Thr
229      50              55              60
231 Ala Ala Ala Ala Ala Ala Ser Ala Ala Ala Ser Thr Ala Arg Gly Met
232 65              70              75                  80
234 Ala Ala Asp Phe Gly Leu Tyr Asn Gln Leu Ala Ala Ser Arg Ser Leu
235             85              90                  95
237 Arg Glu Glu Asp Ala Leu Ser Val Val Leu Thr Arg Met Glu Glu Leu
238         100             105             110
240 Ser Gln Gln Leu Gln Asp Leu Phe Ala Lys Val Ala Leu Leu Asn Pro
241         115             120             125
243 Pro Ala Asn Ala Ser
244      130
246 <210> SEQ ID NO: 8
247 <211> LENGTH: 130
248 <212> TYPE: PRT
249 <213> ORGANISM: Adenovirus
251 <220> FEATURE:
252 <221> NAME/KEY: misc_feature
253 <222> LOCATION: (2)..(5)
254 <223> OTHER INFORMATION: "Xaa" may be any amino acid
256 <220> FEATURE:
257 <221> NAME/KEY: misc_feature
258 <222> LOCATION: (7)..(7)
259 <223> OTHER INFORMATION: "Xaa" may be any amino acid
261 <220> FEATURE:
262 <221> NAME/KEY: misc_feature
263 <222> LOCATION: (9)..(9)
264 <223> OTHER INFORMATION: "Xaa" may be any amino acid
266 <220> FEATURE:
267 <221> NAME/KEY: misc_feature
268 <222> LOCATION: (11)..(11)
269 <223> OTHER INFORMATION: "Xaa" may be any amino acid
271 <220> FEATURE:
272 <221> NAME/KEY: misc_feature
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RAW SEQUENCE LISTING   DATE: 07/19/2002
PATENT APPLICATION: US/09/780,224B   TIME: 14:49:37

Input Set : A:\208859.ST25.txt
Output Set: N:\CRF3\07192002\I780224B.raw

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273 <222> LOCATION: (21)..(21)
274 <223> OTHER INFORMATION: "Xaa" may be any amino acid
276 <220> FEATURE:
277 <221> NAME/KEY: misc_feature
278 <222> LOCATION: (30)..(30)
279 <223> OTHER INFORMATION: "Xaa" may be any amino acid
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (34)..(34)
284 <223> OTHER INFORMATION: "Xaa" may be any amino acid
286 <220> FEATURE:
287 <221> NAME/KEY: misc_feature
288 <222> LOCATION: (45)..(45)
289 <223> OTHER INFORMATION: "Xaa" may be any amino acid
291 <220> FEATURE:
292 <221> NAME/KEY: misc_feature
293 <222> LOCATION: (54)..(57)
294 <223> OTHER INFORMATION: "Xaa" may be any amino acid
296 <220> FEATURE:
297 <221> NAME/KEY: misc_feature
298 <222> LOCATION: (69)..(69)
299 <223> OTHER INFORMATION: "Xaa" may be any amino acid
301 <220> FEATURE:
302 <221> NAME/KEY: misc_feature
303 <222> LOCATION: (74)..(76)
304 <223> OTHER INFORMATION: "Xaa" may be any amino acid
306 <220> FEATURE:
307 <221> NAME/KEY: misc_feature
308 <222> LOCATION: (79)..(83)
309 <223> OTHER INFORMATION: "Xaa" may be any amino acid
311 <220> FEATURE:
312 <221> NAME/KEY: misc_feature
313 <222> LOCATION: (86)..(86)
314 <223> OTHER INFORMATION: "Xaa" may be any amino acid
316 <220> FEATURE:
317 <221> NAME/KEY: misc_feature
318 <222> LOCATION: (88)..(90)
319 <223> OTHER INFORMATION: "Xaa" may be any amino acid
321 <220> FEATURE:
322 <221> NAME/KEY: misc_feature
323 <222> LOCATION: (92)..(95)
324 <223> OTHER INFORMATION: "Xaa" may be any amino acid
326 <220> FEATURE:
327 <221> NAME/KEY: misc_feature
328 <222> LOCATION: (98)..(98)
329 <223> OTHER INFORMATION: "Xaa" may be any amino acid
331 <220> FEATURE:
332 <221> NAME/KEY: misc_feature
333 <222> LOCATION: (100)..(101)
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 07/19/2002
PATENT APPLICATION: US/09/780,224B   TIME: 14:49:38

       Input Set : A:\208859.ST25.txt
       Output Set: N:\CRF3\07192002\I780224B.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:8; Xaa Pos. 3,4,5,7,9,11,21,30,34,45,54,55,56,57,69,74,75,76,79,80,81
Seq#:8; Xaa Pos. 82,83,86,88,89,90,92,93,94,95,98,100,101,105,107,108,110
Seq#:8; Xaa Pos. 111,112,114,115,116,119,120,122,123,124,125,127,129

VERIFICATION SUMMARY   DATE: 07/19/2002
PATENT APPLICATION: **US/09/780,224B**   TIME: 14:49:38

Input Set : **A:\208859.ST25.txt**
Output Set: **N:\CRF3\07192002\I780224B.raw**

```
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:16
L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:32
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:48
L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:64
L:392 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:80
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:96
L:398 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:112
L:401 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:128
```